



CITY OF  
**HAYWARD**  
HEART OF THE BAY

# Hayward Water System Public Health Goal Report

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Utilities Division  
Department of Public Works



# Water Quality Measures

- Two sets of water quality measures have been established by regulatory agencies:
  - Maximum Contaminant Levels (MCLs) – regulatory standards to determine compliance with health and safety requirements
  - Public Health *Goals* (PHGs)/Maximum Contaminant Level *Goals* (MCLGs) – health risk-based targets



# What are Maximum Contaminant Levels?

- Established by California Department of Health for regulated constituents
- *Enforceable* standards, above which water systems must take specific corrective actions
- Set at levels that protect the public from all but a negligible risk and are achievable with current technology
- Hayward Water System typically meets all MCLs



# What are Public Health Goals?

- Set by the California Environmental Protection Agency
- Federal equivalents, set by US Environmental Protection Agency, are known as Maximum Contaminant Level Goals (MCLGs)
- *Non-enforceable* contaminant levels based solely on health risk considerations
- Technological and economic feasibility of achieving goals is not considered
- “Ideal” level for health protection



# Public Health Goal Report

- Required by California Health and Safety Code every three years if PHG or MCLG has been exceeded in three prior years
- Content and timing prescribed by the Code
- Prepared in addition to annual Water Quality Report
- Must include:
  - Health risk assessment
  - Discussion of best available technology
  - Cost of treating water to PHG level



# Public Health Goal Exceedance

- One constituent, total coliform, was detected above the applicable PHG during the past three years
- Total coliform levels did not exceed MCL in this period
- Report has been prepared in accordance with Health and Safety Code requirements
- Code requires a public hearing for governing body to receive report and public comments



# What is Total Coliform?

- Widely present in the environment
- No health risks have been identified with total coliform
- Indicator that other, potentially harmful bacteria may be present
- Presence of coliform requires follow-up sampling to ensure that other bacteria is not in the system
- Measured as a “percent positive” value
- MCL is that no more than 5% of samples collected can be positive
- MCLG is effectively zero percent positive



# Coliform Sampling Results

- 4800 samples collected from distribution system during past three years (2007 – 2009)
- 25 samples (0.5%) were positive
- MCLG of zero percent positive samples was exceeded in 12 of 36 months
- Repeat samples, taken within 24 hours, were all negative
- MCL of 5% (about 6 positive samples each month) was never exceeded





# Health Risks & Treatment Technologies

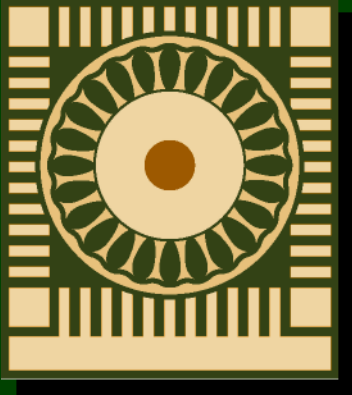
- No specific health risk identified with coliform – indicator only of other potential pathogens
- All best available technology and treatment techniques are already in place
- Other useful measures, such as cross-connection control and water main flushing, are also part of normal operations
- Higher disinfectant levels could lower the incidence of coliform, but would increase disinfectant byproduct levels, some of which could have adverse health impacts – thus not recommended



# Next Steps

- Conduct public hearing
- Adopt resolution indicating that Council has reviewed the report and received public comments, and has directed staff to inform the California Department of Public Health of these actions
- Staff will continue to implement appropriate operation and maintenance activities and to monitor coliform levels





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